# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2007-0712 FOR

MR. JULIUS AND KLARA JUHASZ, AND
THE THOMAS AND JOSEPHINA KALURAYIL FAMILY TRUST, MR. GEORGE
PUTHENPURAYIL, AND MS. SHYLIMOL P. ABRAHAM,
FERG'S GENERAL MARKET, 3735 47<sup>TH</sup> AVENUE, SACRAMENTO
SACRAMENTO COUNTY

This Order is issued to Mr. and Mrs. Julius and Klara Juhasz, and The Thomas and Josephina Kalapurayil Family Trust, Mr. George Puthenpurayil, and Ms. Shylimol Abraham, hereafter referred to as Dischargers, based on provisions of California Water Code section 13304, which authorizes the California Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board) to issue a Cleanup and Abatement Order (Order), and Water Code section 13267, which authorizes the Regional Water Board to require preparation and submittal of technical and monitoring reports.

The Executive Officer finds, with respect to the Dischargers' acts or failure to act, the following:

### PROPERTY OWNERSHIP AND OPERATIONS

- 1. According to Sacramento County Environmental Management Department (SCEMD) records, SCEMD Permit No. R0100886 was issued to Mr. Julius and Mrs. Klara Juhasz to operate three underground storage tanks at the Ferg's General Market formerly located at 3735 47<sup>th</sup> Avenue in Sacramento. Mr. and Mrs. Juhasz operated the Ferg's General Market as a market and gasoline station from 1983 to 1998. According to Sacramento County property ownership records Mr. and Mrs. Juhasz owned the property from 1983 to 2002, the previous property owner was Orbit Stations Inc. The Site location is shown on Figures 1 and 2, which are made part of this Order. During underground storage tank (UST) removal activities in August 1999, stained soil and gasoline odors were observed. Total petroleum hydrocarbons as gasoline (TPH-G), toluene, ethylbenzene, and xylenes were detected in soil samples collected from beneath the USTs, and benzene and methyl tertiary butyl ether (MTBE) were detected in soil samples collected beneath the former product piping lines and dispensers. Mr. and Mrs. Juhasz are subject to this Order because they owned the property and operated the station at the time the UST system caused or permitted waste to be discharged to waters of the State where it has created a condition of pollution and nuisance.
- 2. On 18 January 2002, the Thomas and Josephina Kalapurayil Family Trust, Mr. George Puthenpurayil, and Ms. Shylimol Abraham purchased the property at 3735 47<sup>th</sup> Avenue, Sacramento. The SCEMD named the Thomas and Josephina Kalapurayil Family Trust, Mr. Puthenpurayil, and Ms. Abraham as responsible parties in the investigation and cleanup of the former underground storage tank system in a letter dated 21 October 2003. The Thomas and Josephina Kalapurayil Family Trust, Mr. Puthenpurayil, and Ms. Abraham are subject to this Order and are responsible parties because as the current property owners they are responsible for the condition of their property, have knowledge of the discharge, and have the ability to control access to the property.

### **BACKGROUND**

- 3. The Ferg's General Market (Site) operated as a gasoline service station and general store from 1960 until 1998. The UST system consisted of three 10,000-gallon gasoline USTs, nine gasoline dispensers and associated product piping. The UST system, including all storage tanks, dispenser islands, and associated product piping, was removed in August 1999. The Site is currently a vacant lot.
- 4. In January 1998 MTBE pollution was detected at 14 micrograms per liter (ug/L), and confirmed by Regional Water Board staff at 20 ug/L, in Fruitridge Vista Water Company (FVWC) Well No. 11, located approximately 300 feet south of the Site. FVWC Well No. 11 was removed from service in January 1998. Cessation in operation of the FVWC Well No. 11 caused a change in the groundwater flow direction. During operation of FVWC Well No. 11, groundwater from the Site flowed towards the south. After shutdown of the FVWC well No.11, groundwater flow returned to the regional flow direction, which is to the southeast.
- 5. During removal of the UST system in August 1999, an inspector from SCEMD observed gasoline odors and stained soil. Soil samples from beneath the former USTs contained up to 3,300 milligrams per kilogram (mg/kg) of TPH-G, up to 46 mg/kg of toluene, up to 54 mg/kg of ethylbenzene, and up to 790 mg/kg of xylenes. Soil samples collected beneath the former product piping and product dispensers contained maximum concentrations of benzene and MTBE at 17 mg/kg and 50 mg/kg, respectively.
- 6. In January and February 2000, the initial soil and groundwater investigation showed TPH-G up to 17,000 mg/kg, MTBE up to 33 mg/kg, and benzene, toluene, ethylbenzene, and total xylenes (BTEX) up to 39, 900, 420, and 2,100 mg/kg, respectively, in soil up to 50 feet below ground surface (bgs). TPH-G, MTBE, and BTEX were at 120,000, 7,000, 17,000, 3,000, 18,000, and 350,000 micrograms per liter (ug/L), respectively, in groundwater samples collected at approximately 40 feet bgs.
- 7. SCEMD staff provided oversight for UST system removal, site investigation, and remedial activities conducted at the site until October 2003. Due to waste constituent impacts to multiple wells belonging to the FVWC, including FVWC well No. 11, and at the time, the limited amount of UST Cleanup Fund account moneys remaining, the Regional Water Board became the lead agency for the case. Since October 2003, the Regional Water Board has been providing regulatory oversight of the investigation and cleanup of this site.
- 8. During the first quarter 2007 monitoring event, petroleum constituents in groundwater were reported as high as: TPH-G 262 ug/L, MTBE 1,360 ug/L, tertiary butyl alcohol (TBA) 340 ug/L, and ethyl tert butyl ether (ETBE) 1 ug/L. The following constituents had elevated detection limits: tertiary amyl methyl ether (TAME) <50 ug/L, ETBE <50 ug/L, di-isopropyl ether (DIPE) <50 ug/L, and 1,2-dichloroethane (1,2-DCA) <50 ug/l. These petroleum constituents constitute "waste" as defined in Water Code section 13050. Depth to groundwater has varied from 34 to 42 feet bgs. The waste has migrated in groundwater to

the south approximately 300 feet and impacted a municipal water supply well, and waste may have migrated southeast in the down-gradient direction and impacted groundwater underlying the active Arco service station located at 3800 47<sup>th</sup> Avenue, Sacramento.

- 9. In June 2000, approximately 550 cubic yards of soil was excavated and removed from the Site. In December 2003, the Dischargers began operation of a soil vapor extraction (SVE) system to cleanup wastes in soil. In August 2005, a groundwater extraction (GWE) test was conducted and in October 2005, an air sparge test was conducted. In January and February 2006, an ozone injection pilot test was performed. The ozone injection pilot test generated hexavalent chromium as a by-product of the geochemical reaction with the subsurface soils. Hexavalent chromium, which constitutes a "waste" as defined in Water Code section 13050, has been detected in groundwater at a maximum concentration of 384 ug/L. From May 2006 through July 2006, the Dischargers operated a temporary GWE system to remove hexavalent chromium wastes in groundwater.
- 10. The Water Quality Objectives for protection of beneficial uses of groundwater in the area of the Site are: 5 ug/l for TPH-G, 0.15 ug/L for benzene, 42 ug/L toluene, 29 ug/L ethylbenzene, 17 ug/L total xylenes, 5 ug/L for MTBE, and 50 ug/L total chromium.
- 11. Soil and groundwater remediation to date has not effectively remediated the entire plume.
- 12. In September 2006, a Feasibility Study was submitted by the Discharges to implement: groundwater extraction with ozone sparging to address on-site contamination, and air sparging to enhance biodegradation to address the down-gradient plume. Due to the undetermined extent of the groundwater pollution, the Regional Water Board could not concur with the proposed off-site remediation plan. Regional Water Board staff requested submission of an Interim Remedial Action Plan (IRAP) to implement the proposed on-site remedial activities, and a scope of work for additional groundwater delineation to the south of the Site.
- 13. In November 2006, the Dischargers submitted the requested IRAP, which presented the construction plans for the on-site groundwater extraction and ozone sparge systems. The IRAP also included a scope of work for installation for one A zone groundwater monitoring well to the south of the site near existing well MW-12B.
- 14. To date, the maximum money available from the State Water Board UST Cleanup Fund account has been used by the Dischargers for investigation and cleanup. The Thomas and Josephina Kalapurayil Family Trust, Mr. George Puthenpurayil, and Ms. Shylimol Abraham obtained an additional 1.5 million dollars from the State Water Board's Orphan Site Cleanup Account (OSCA).
- 15. FVWC Well No. 11 will be destroyed, and down-well testing will be performed as required by a Water Code section 13267 Order issued to FVWC by the Regional Board in January 2003.

FVWC intends to install a new water supply well approximately 1,000 feet to the east-northeast of the Site.

- 16. A Super Star Plus gasoline station (Super Star Plus) located at 6351 Franklin Boulevard, Sacramento (Figure 2), has also discharged from its underground storage tank system to soil and groundwater. Super Star Plus may also be a contributor of MTBE pollution detected in FVWC Well No. 11. The groundwater pollution plumes emanating from the Super Star Plus gasoline station and the Site appear to be commingled in the vicinity of FVWC well No. 11. A separate Cleanup and Abatement Order has been prepared for the Super Star Plus Facility.
- 17. A former Arco Service Station No. 2019 (Former Arco), located at 3801 47<sup>th</sup> Avenue, Sacramento (Figure 2), has discharged from its underground storage tank system to soil and groundwater. Current Regional Water Board records show no evidence of commingled plumes in groundwater between the Former Arco facility and the Site. A separate Cleanup and Abatement Order has been prepared for the Former Arco.
- 18. The active Arco Service Station No. 5580 (Active Arco), located at 3800 47<sup>th</sup> Avenue, Sacramento (Figure 2), has discharged from its underground storage tank system to soil and potentially to groundwater. The source of groundwater pollution detected at the Active Arco has not been determined, and may be due to off-site down-gradient migration from the Ferg's General Market. Additional monitoring is needed prior to determining the source of groundwater pollution under the Active Arco.
- 19. This Order addresses only the Ferg's General Market. Cleanup and Abatement Order No. R5-2007-0714 requires cleanup at the Super Star Plus; Cleanup and Abatement Order No. R5-2007-0713 requires cleanup at the Former Arco. Further evidence of commingled plumes may warrant amendments to some or all of these three Orders.

### **AUTHORITY - LEGAL REQUIREMENTS**

20. Section 13304(a) of the California Water Code provides that:

"Any person who has discharged or discharges waste into waters of the state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the State Water Board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the State Water Board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at

the request of the regional board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant."

21. Section 13304(f) of the California Water Code provides that:

"Replacement water provided pursuant to subdivision (a) shall meet all applicable federal, state and local drinking water standards and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge of waste"

22. Section 13267(b)(1) of the California Water Code provides that:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

23. Section 13304(c)(1) of the California Water Code provides that:

"If waste is cleaned up or the effects of the waste are abated, or, in the case of threatened pollution or nuisance, other necessary remedial action is taken by any government agency, the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions. . ."

24. The State Water Resources Control Board (hereafter State Water Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*. This Policy sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Water Board Resolution 68-16, the *Statement of Policy With Respect to Maintaining High Quality of Waters in California*. Resolution 92-49 and the Basin Plan establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an

alternative level that is the most stringent level that is economically and technologically feasible in accordance with Title 23, California Code of Regulations (CCR) Section 2550.4. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Water Board.

- 25. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which describes the Regional Water Board's strategy for managing contaminated sites. This Policy is based on Water Code Sections 13000 and 13304, the Title 27 CCR, Division 2, Subdivision 1 regulations, and State Water Board Resolution Nos. 68-16 and 92-49. The Policy includes site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the bases for establishment of soil and groundwater cleanup levels.
- 26. The State Water Board adopted the Water Quality Enforcement Policy, which states in part: "At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the RWQCB allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the CAO should require the discharger(s) to abate the effects of the discharge. Abatement activities may include the provision of alternate water supplies." (Enforcement Policy, p. 19.)
- 27. The Regional Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, 4<sup>th</sup> Edition* (hereafter Basin Plan) designates beneficial uses of the waters of the State, establishes water quality objectives (WQOs) to protect these uses, and establishes implementation policies to implement WQOs. The beneficial uses of the groundwater beneath the site include domestic, municipal, industrial, and agricultural supply.
- 28. The wastes detected at the site are not naturally occurring, and MTBE is a suspected carcinogen. Pollution of groundwater with these wastes impairs or threatens to impair the beneficial uses of the groundwater.
- 29. WQOs listed in the Basin Plan include numeric WQOs, e.g., state drinking water maximum contaminant levels (MCLs), and narrative WQOs, including the narrative toxicity objective and the narrative tastes and odors objective for surface and groundwater. Chapter IV of the Basin Plan contains the *Policy for Application of Water Quality Objectives*, which provides that "[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Regional Water Board will, on a case-bycase basis, adopt numerical limitations in orders which will implement the narrative objectives." The numerical limits for the constituents of concern listed in the following table implement the Basin Plan WQOs.

SACRAMENTO, SACRAMENTO COUNTY

Constituent Limits WQO

Total Petroleum 5 μg/l Tastes and McKe

Constituent	Limits	WQO	Reference
Total Petroleum	5 μg/l	Tastes and	McKee & Wolf, Water Quality
Hydrocarbons as		Odors	Criteria, SWRCB, p. 230
Gasoline			
Benzene	0.15 μg/l	Toxicity	California Public Health Goal
			(OEHHA)
Toluene	42 μg/l	Taste and Odor	Federal Register, Vol. 54, No. 97
Ethylbenzene	29 µg/l	Taste and Odor	Federal Register, Vol. 54, No. 97
Total Xylenes	17 μg/l	Taste and Odor	Federal Register, Vol. 54, No. 97
MTBE	5 μg/l	Taste and Odor	Federal Register, Vol. 54, No. 97
TBA	12 µg/l	Toxicity	California Drinking Water Action
			Level (DHS)
DIPE	0.8 µg/l	Taste and	Amoore and Hautala, J. <i>Applied</i>
		Odors	<i>Tox.</i> , Vol. 3, No. 6, 1983
ETBE	13 ug/l	Toxicity	Guidance Levels based on
			MTBE MCL
TAME	13 ug/l	Toxicity	Guidance level based on MTBE
			MCL
EDB	0.01 µg/l	Toxicity	California public health Goal
			(OEHHA)
1,2-DCA	0.4 µg/l	Toxicity	California public health Goal
			(OEHHA)
Total Chromium	50 μg/l	Toxicity	Maximum Contaminant Level
			(MCL) California Department of
			Health Services

TPH-G = total petroleum hydrocarbons as gasoline

MTBE = methyl tert butyl ether TBA = tertiary butyl alcohol DIPE = di isoproryl ether ETBE = ethyl tert butyl ether

TAME = tert amyl methyl ether

1,2-DCA = 1,2-dichloroethane

EDB = ethylene dibromide µg/L= micrograms per liter

30. The constituents listed in Finding No. 29 are wastes as defined in California Water Code Section 13050(d). The groundwater exceeds the WQOs for the constituents listed in Finding No. 8 and 9. The exceeding of applicable WQOs in the Basin Plan constitutes pollution as defined in California Water Code Section 13050(I)(1).

## **DISCHARGERS LIABILITY**

31. As described in Findings 1 through 11, the Dischargers are subject to an order pursuant to Water Code section 13304 because the Dischargers have caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and

continues to threaten to create, a condition of pollution or nuisance. The condition of pollution is a priority violation and issuance or adoption of a cleanup or abatement order pursuant to Water Code Section 13304 is appropriate and consistent with policies of the Regional Water Board.

- 32. This Order requires investigation and cleanup of the site in compliance with the Water Code, the applicable Basin Plan, Resolution 92-49, and other applicable plans, policies, and regulations.
- 33. As described in Finding 1 through 11, the Dischargers are subject to an order pursuant to Water Code section 13267 to submit technical reports because existing data and information about the Site indicate that waste has been discharged, is discharging, or is suspected of discharging, at the property, which was owned and operated by Mr. and Mrs. Julius and Klara Juhasz, and is owned by The Thomas and Josephina Kalapurayil Family Trust, Mr. George Puthenpurayil, and Ms. Shylimol Abraham, collectively the Dischargers named in this Order. The technical reports required by this Order are necessary to assure compliance with Section 13304 of the California Water Code, including to adequately investigate and cleanup the Site to protect the beneficial uses of waters of the State, to protect against nuisance, and to protect human health and the environment.
- 34. If the Dischargers fail to comply with this Order, the Executive Officer may request the Attorney General to petition the superior court for the issuance of an injunction.
- 35. If the Dischargers violate this Order, the Dischargers may be liable civilly in a monetary amount provided by the Water Code.
- 36. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), pursuant to Title 14 CCR Section 15321(a)(2). The implementation of this Order is also an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), in accordance with Title 14 CCR, Sections 15308 and 15330.
- 37. Any person affected by this action of the Central Valley Regional Water Board may petition the State Water Board to review the action in accordance with Title 23 CCR Sections 2050-2068. The regulations may be provided upon request and are available at <a href="www.swrcb.ca.gov">www.swrcb.ca.gov</a>. The State Water Board must receive the petition within 30 days of the date of this Order.

### **REQUIRED ACTIONS**

**IT IS HEREBY ORDERED** that, pursuant to California Water Code Section 13000, Section 13304 and Section 13267, Mr. and Mrs. Julius and Klara Juhasz, and The Thomas and

Josephina Kalapurayil Family Trust, Mr. George Puthenpurayil, and Ms. Shylimol Abraham (Dischargers) shall:

- 1. Investigate the discharges of waste, clean up the waste, and abate the effects of the waste, forthwith, resulting from activities at the former Ferg's General Market, 3735 47<sup>th</sup> Avenue, Sacramento, in conformance with State Water Board Resolution No. 92-49 *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* and with the Regional Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV). "Forthwith" means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below.
- All work and reports shall follow the Appendix A Reports, Tri-Regional Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Sites (Appendix A - Reports) which is attached and made a part of this Order, and under permits required by State, County, and/or Local agencies.

### SITE HISTORY

3. By 15 July 2007, submit a report to the best of the Discharger's abilities documenting the site's history since the tanks were installed including a chronology of the site's ownership and operator history, any evidence detailing the time and origin of the release, and the fee title owner. Information in this report may be used to identify additional responsible parties who may be added to this or future orders.

### SITE ASSESSMENT

- 4. By 30 July 2007 submit a Site Investigation Workplan (Workplan) to collect a sufficient number of soil, soil vapor and groundwater samples to determine the lateral and vertical extent of waste constituents and to complete site characterization. The work plan shall contain the information in Appendix A, which is made part of this Order. Within 30 days of staff concurrence with the Workplan, but no later than 30 September 2007, implement the work plan in accordance with the approved time schedule, which shall become part of this Order.
- 5. Pending completion of the monitoring well network, but no later than 15 November 2007, submit a revised Feasibility Study to address the down-gradient extent of the groundwater pollutant plume cleanup in coordination and cooperation with nearby properties, utilizing remediation technologies with a likelihood of success that will not exacerbate migration of known groundwater plumes in the area.

SACRAMENTO, SACRAMENTO COUNTY

**FEASIBILITY STUDY** 

6. By 15 November 2007, submit a revised Feasibility Study (FS) that provides a summary of remedial alternatives evaluated to address applicable cleanup levels for the affected or threatened human health and/or waters of the State. The revised Feasibility Study shall propose at least two remedial technologies that have a substantial likelihood to achieve cleanup of all impacted soils and must be evaluated with respect to their ability to be implemented, cost, and effectiveness. The revised Feasibility Study shall include the rationale for selecting the preferred remedial alternative. The Dischargers shall attempt to clean up each constituent to background concentrations, or to the lowest level that is technically and economically achievable and which complies with all applicable WQOs of the Basin Plan and promulgated water quality criteria.

#### REMEDIATION

- 7. Within 90 days of Regional Water Board staff concurrence with the proposed remedial action described in the Feasibility study (FS), but no later than 1 March 2008, submit a Final Remedial Plan (FRP). The FRP must include a detailed description of the remedial actions to address cleanup of the entire groundwater plume and source area soils. The FRP shall also include a schedule to implement all remedial actions. Within 90 Days of Regional Water Board staff's approval of the FRA, but no later then 15 May 2008, begin implementation of the approved remedial actions.
- 8. Submit **monthly** status reports for the first three months of operation of any new systems. After the first 3 months of new system operation, remediation system status reports shall be included in the quarterly groundwater monitoring reports. At a minimum, the monthly status reports shall include:
  - Site maps indicating the capture zone and lateral and vertical extent of waste plumes.
  - Average extraction rates of all treatment systems.
  - Influent and effluent concentrations of TPHg, benzene, toluene, ethylbenzene, total xylenes, MtBE, DIPE, ETBE, TAME, TBA, and hexavalent chromium.
  - Mass of hydrocarbons treated during the reporting period and cumulative to date.
  - Estimated mass of wastes remaining and predicted time frame for meeting cleanup objectives.
  - Running and down time for the remediation system(s).
  - Summary of consultant visits to the site.
  - Evaluation of the overall remediation program and recommendations to correct deficiencies or increase efficiency.
- 9. The Dischargers shall insure that any groundwater extraction system(s) "zone of capture" completely envelops and controls the pollutant plume(s) (to the 0.50 ug/L detection limit). If sampling results in any two consecutive months (or quarters) demonstrate that any part of the

contamination plume(s) is not within the "zone of capture", the Dischargers shall include with the second status report a proposal to mitigate the condition. The proposed actions shall be implemented within 60 days of staff approval of the proposal.

### **GROUNDWATER MONITORING**

- 10. Conduct monitoring of the existing wells and any additional wells in accordance with MRP No. R5-2006-0811 or any revised MRP issued by the Executive Officer.
- 11. The Dischargers shall submit a paper copy of all groundwater monitoring reports to this Regional Water Board office and submit an electronic copy, which conforms to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, electronically over the internet to the GeoTracker database system. The electronic copy and all associated electronic files are due to the GeoTracker database the same day the paper copy is due to this office. Groundwater monitoring reports are not considered submitted to the regulatory agency until all required files have been uploaded to the GeoTracker database. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Water Board's web site.

#### RISK ASSESSMENT

12. By **30 July 2007**, submit a Work Plan for preparing a Health Risk Assessment. The Health Risk Assessment must include evaluation of all exposure pathways including evaluation of indoor air impacts to commercial and residential occupants overlying identified soil and groundwater pollution. The Work Plan must include an implementation schedule and detailed description of the proposed selected site data for comparison to the Use of California Human Health Screening Levels in Evaluation of Contaminated Properties was prepared by the California Environmental Protection Agency (Cal/EPA). The site-specific risk assessment must use the Office of Environmental Health Hazard Assessment (OEHHA) toxicity data (California cancer slopes). If the risk assessment suggests that the contamination poses a threat to human health, the report shall include a work plan to abate the risk or exposure. The proposed abatement work shall begin within 60 days of approval by Regional Water Board staff, or by 15 October 2007, whichever is sooner. The approved time schedule in the Work Plan shall become part of the Order.

#### PUBLIC PARTICIPATION

13. By **30 July 2007**, submit a *Public Participation Plan*. The *Public Participation Plan* shall solicit the public's concerns and disseminate information to the public regarding the investigation and proposed cleanup activities at the site. The Public Participation Plan shall be updated as necessary to reflect any significant changes in the degree of public interest as the site investigation and cleanup process moves toward completion.

#### -12-

# **GENERAL REQUIREMENTS**

- 14. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, have appropriate reports prepared by, or under the supervision of, a registered professional engineer or geologist and signed by the registered professional. All technical reports submitted by the Dischargers shall include a cover letter signed by the Dischargers, or an authorized representative, certifying under penalty of law that the signer has examined and is familiar with the report and that to their knowledge, the report is true, complete, and accurate. The Dischargers shall also state if they agree with any recommendations/proposals and whether they approved implementation of said proposals.
- 15. Upon startup of any remediation system(s), operate the remediation system(s) continuously, except for periodic and required maintenance or unpreventable equipment failure. The Dischargers shall notify the Regional Water Board within 24 hours of any unscheduled shutdown of the remediation system(s) that lasts longer than 48 hours. This notification shall include the cause of the shutdown and the corrective action taken (or proposed to be taken) to restart the system. Any interruptions in the operation of the remediation system(s), other than for maintenance, emergencies, or equipment failure, without prior approval from Regional Water Board staff or without notifying the Regional Water Board within the specified time is a violation of this Order. Within 7 working days of a shutdown, the Dischargers shall submit a Technical Report containing at a minimum, but not limited to the following information:
  - times and dates equipment were not working,
  - cause of shutdown,
  - if not already restarted, a time schedule for restarting the equipment, and,
  - a Cleanup Assurance Plan to ensure that similar shutdowns do not reoccur. Proposed Cleanup Assurance Plans are to be completed within 30 days of the system shutdown.
- 16. Notify Regional Water Board staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
- 17. Obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning the work.
- 18. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been either amended or rescinded in writing.
- 19. Optimize remedial systems as needed to improve system efficiency, operating time, and/or waste removal rates, and report on the effectiveness of the optimization in the quarterly reports.

- 20. Maintain a sufficient number of monitoring wells to completely define and encompass the waste plume(s). If groundwater monitoring indicates the waste in groundwater has migrated beyond laterally or vertically defined limits during the quarter, then the quarterly monitoring reports must include a work plan and schedule, with work to begin within thirty days of Regional Water Board staff approval, to define the new plume limits.
- 21. The Dischargers shall submit a paper copy of all reports and work plans to this Regional Water Board office and submit electronic copies of all reports and work plans, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, electronically over the internet to the GeoTracker database system. The electronic copy and all associated electronic files are due to the GeoTracker database the same day the paper copy is due to this office. Reports and work plans are not considered submitted to the regulatory agency until all required files have been uploaded to the GeoTracker database. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Water Board's web site.
- 22. If the Dischargers are unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Dischargers may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. An extension may be granted by revision of this Order or by a letter from the Executive Officer. Extension requests not approved in writing by the Executive Officer with reference to this order are denied.
- 23. All work and directives referenced in this Order are required regardless of whether or not the UST Cleanup Fund approves the work for reimbursement.
- 24. If additional time is needed due to financial hardship, you need to submit the following information to Regional Water Board staff to support your claim:
  - a. Federal tax returns for the last two years;
  - b. Balance sheets, and profit and loss statements for the two most recent years of operation for your business or corporation;
  - c. A schedule detailing all real property interests and liabilities associated with those interests:
  - d. Information regarding all other business interests;
  - e. Information regarding all other sources of income; and
  - f. A detailed estimate of the costs to prepare and implement the requested work.

In addition, comprehensive general liability (CGL) insurance policies purchased before about 1987 generally include coverage for some environmental investigation and cleanup costs. Please provide information about any CGL, fire or other insurance policies covering the real property or the business operations. Information should include copiers of insurance policies,

policy numbers, the name and contact information of your insurance broker, cancelled checks showing premium payments, the name of the insurance company(ies) from which you brought insurance, or any other information you may have or remember about applicable insurance policies. While additional time could be granted, the investigation work will still be required at some point. Be aware that information provided to Regional Water Board staff is available to the public, and cannot be held confidentially by the Regional Water Board.

25. If, in the opinion of the Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability.

This Order is effective upon the date of signature.

PAMELA C. CREEDON
Executive Officer
Executive Officer
(Date)
(23.3)



